City of Bellevue
Development Services Department
Land Use Staff Report

Proposal Name:	Brown-Divine Residence
Proposal Address:	17909 SE 60th St
Proposal Description:	Land Use review of a Critical Area Land Use Permit to construct a new single-family residence, driveway, and associated improvements on an undeveloped site with a Type-N stream and steep slope critical areas. The proposal will impact 4,907 square feet of the 75-foot structure setback from the toe-of-slope and will disturb the 15-foot structure setback from the stream buffer. Mitigation of impacts is proposed through planting within the 50-foot stream buffer.
File Number:	20-120675-LO
Applicant:	Steven Brown, Property Owner
Decisions Included:	Critical Areas Land Use Permit (Process II. 20.30P)
Planner:	Reilly Pittman, Land Use Planner
State Environmental Policy Act Threshold Determination:	Exempt
Director's Decision:	**Approval with Conditions** *Reilly Pittman* By: *Acting Planning Manager* for Michael A. Brennan, Director Development Services Department

Application Date:	November 5, 2020
Notice of Application Date:	December 10, 2020
Decision Publication Date:	November 4, 2021
Project Appeal Deadline:	November 18, 2021

For information on how to appeal a proposal, visit Development Services Center at City Hall or call (425) 452-6800. Appeal of the Critical Areas Land Use Permit decision must be made to the City of Bellevue City Clerk's Office by 5 p.m. on the date noted above as the appeal deadline.

CONTENTS

Documents Referenced in File

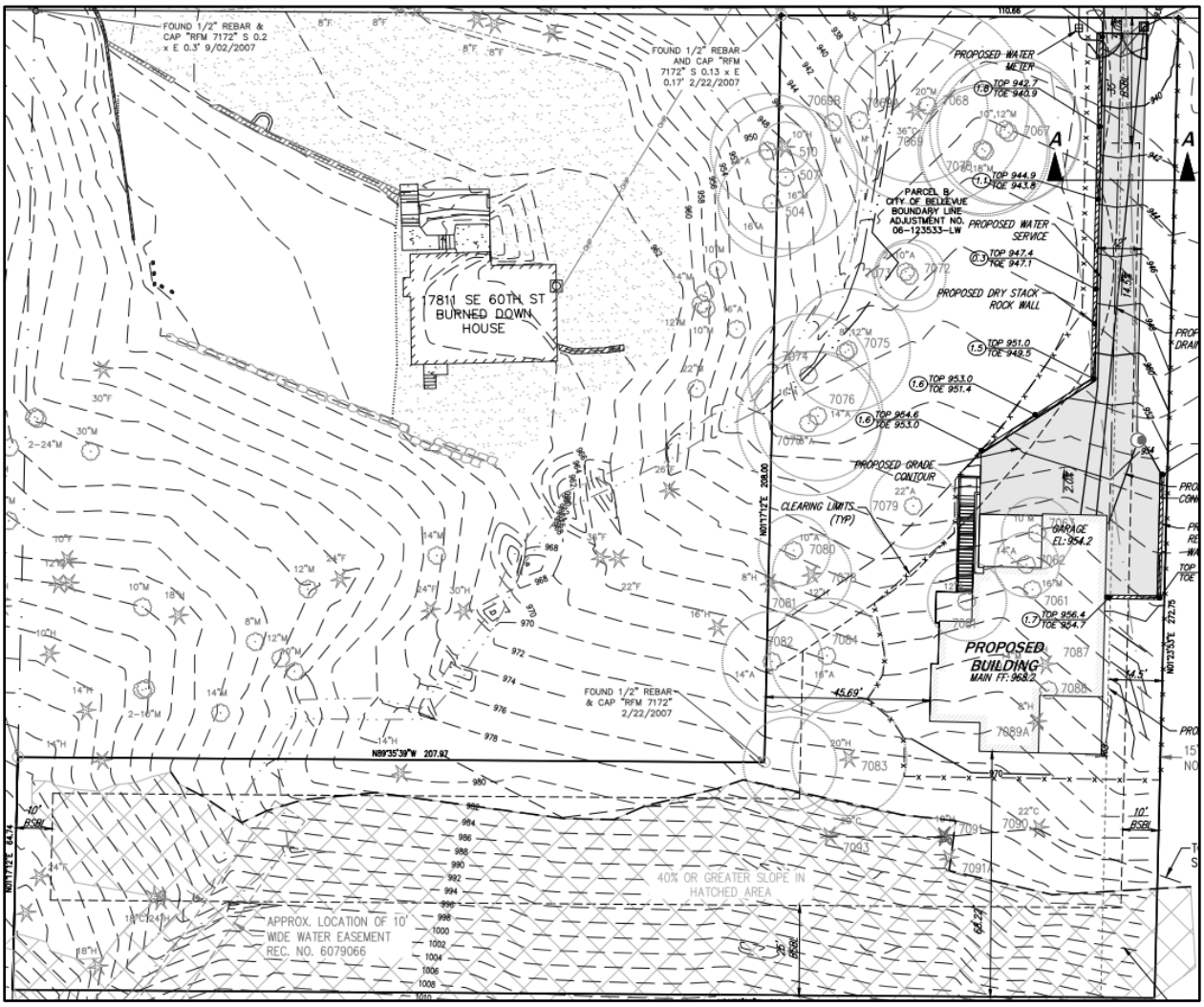
1. Mitigation Plan and Project Plans, Attached
2. Geotechnical Report and Update Letters, In File
3. Critical Areas Report, In File
4. Arborist Tree assessment, In File

I. Proposal Description

The project proposal consists of the development of a single-family residence (SFR) on the southeastern portion of the site located at 17909 SE 60th St (AFN # 2424059036). The proposed SFR will have a footprint of 2,983 sf; a driveway extending from the north and accessing from SE 60th St will add an additional 3,137 sf of impervious surface for a total impervious surface area of 6,120 sf (41.3%). The site is encumbered by a type N stream, steep slopes, and their associated buffers and/or structure setbacks; the applicant proposes to reduce the 75-foot toe-of-slope setback to ten feet, removing 4,907 sf of the slope setback. In addition, the proposal includes a request to reduce a stream buffer structure setback from 15-feet to 10-feet to accommodate the northern portion of the proposed SFR as well as tree removal/replanting. **See figure 1 for proposal site plan**.

A Critical Areas Land Use Permit (CALUP) with a Critical Areas Report is required to modify and disturb streams, steep slopes, and their associated buffers and/or structure setbacks. Per LUC 20.25H.230, the critical areas report is intended to provide flexibility for sites where the expected critical areas functions and values are not present or severely limited due to degraded conditions. The submitted critical areas report documents that the existing degraded ecological conditions of the site and that the proposed mitigation will increase the ecological functions and values beyond the existing condition. Approval of a Critical Areas Land Use Permit is required for the proposed impacts and any temporary disturbance that will be restored.

Figure 1

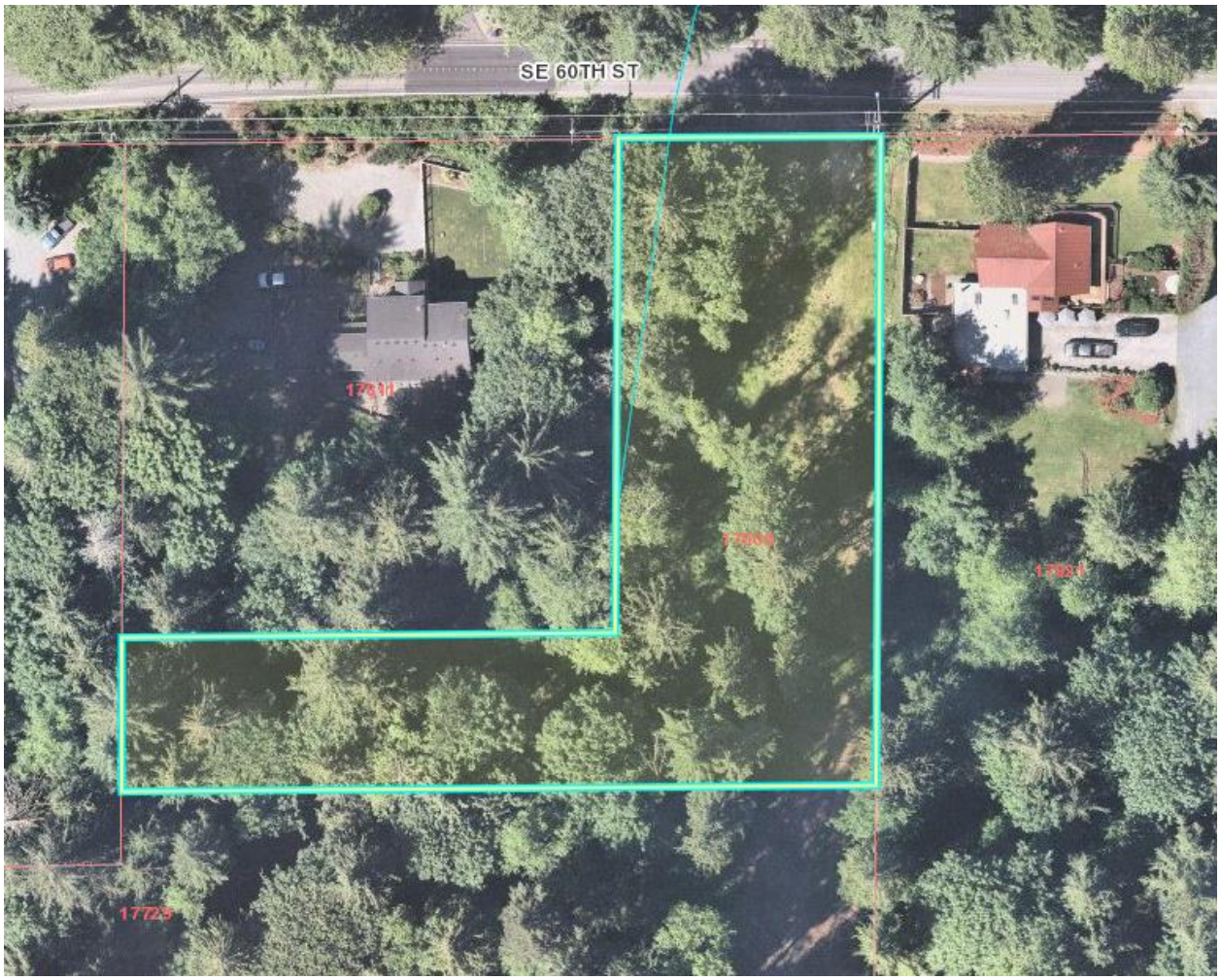


II. Site Description, Zoning, Land Use and Critical Areas

A. Site Description

The project site is located at 17909 SE 60th St in the Cougar Mountain/Lakemont Subarea. The site is surrounded by large lot residential properties to the north, east, and west; the lot to the south is undeveloped. The subject property obtains access from the north at SE 60th St, a dedicated public right-of-way. The site is currently undeveloped and encumbered by a type N stream, steep slopes, and their associated buffers and/or structure setbacks; it contains vegetation typical of the area such as maples, alders, hemlocks, and various shrubs. **See Figure 2 below for project location and current site condition.**

Figure 2



B. Zoning

The property is zoned R-1, single-family residential and the proposed house and improvements are allowed in this zoning district

C. Land Use Context

The property has a Comprehensive plan Land Use Designation of SF-L (Single Family Low Density). Construction of a home and improvements is consistent with this land use.

D. Critical Areas – Functions and Values

i. Streams and Riparian Areas

Most of the elements necessary for a healthy aquatic environment rely on processes sustained by dynamic interaction between the stream and the adjacent riparian area (Naiman et al., 1992). Riparian vegetation in floodplains and along stream banks

provides a buffer to help mitigate the impacts of urbanization (Finkenbine et al., 2000 in Bolton and Shellberg, 2001). Riparian areas support healthy stream conditions.

Riparian vegetation, particularly forested riparian areas, affect water temperature by providing shade to reduce solar exposure and regulate high ambient air temperatures, slowing or preventing increases in water temperature (Brazier and Brown, 1973; Corbett and Lynch, 1985).

Upland and wetland riparian areas retain sediments, nutrients, pesticides, pathogens, and other pollutants that may be present in runoff, protecting water quality in streams (Ecology, 2001; City of Portland 2001). The roots of riparian plants also hold soil and prevent erosion and sedimentation that may affect spawning success or other behaviors, such as feeding.

Both upland and wetland riparian areas reduce the effects of flood flows. Riparian areas and wetlands reduce and desynchronize peak crests and flow rates of floods (Novitzki, 1979; Verry and Boelter, 1979 in Mitsch and Gosselink, 1993). Upland and wetland areas can infiltrate floodflows, which in turn, are released to the stream as baseflow.

Stream riparian areas, or buffers, can be a significant factor in determining the quality of wildlife habitat. For example, buffers comprised of native vegetation with multi-canopy structure, snags, and down logs provide habitat for the greatest range of wildlife species (McMillan, 2000). Vegetated riparian areas also provide a source of large woody debris that helps create and maintain diverse in-stream habitat, as well as create woody debris jams that store sediments and moderate flood velocities.

Sparsely vegetated or vegetated buffers with non-native species may not perform the needed functions of stream buffers. In cases where the buffer is not well vegetated, it is necessary to either increase the buffer width or require that the standard buffer width be restored or revegetated (May 2003). Until the newly planted buffer is established the near term goals for buffer functions may not be attained.

Riparian areas often have shallow groundwater tables, as well as areas where groundwater and surface waters interact. Groundwater flows out of riparian wetlands, seeps, and springs to support stream baseflows. Surface water that flows into riparian areas during floods or as direct precipitation infiltrates into groundwater in riparian areas and is stored for later discharge to the stream (Ecology, 2001; City of Portland, 2001).

ii. Geologic Hazard Areas

Geologic hazards pose a threat to the health and safety of citizens when commercial, residential, or industrial development is inappropriately sited in areas of significant

hazard. Some geologic hazards can be reduced or mitigated by engineering, design, or modified construction practices. When technology cannot reduce risks to acceptable levels, building in geologically hazardous areas is best avoided (WAC 365-190).

Steep slopes may serve several other functions and possess other values for the City and its residents. Several of Bellevue's remaining large blocks of forest are located in steep slope areas, providing habitat for a variety of wildlife species and important linkages between habitat areas in the City. These steep slope areas also act as conduits for groundwater, which drains from hillsides to provides a water source for the City's wetlands and stream systems. Vegetated steep slopes also provide a visual amenity in the City, providing a "green" backdrop for urbanized areas enhancing property values and buffering urban development.

iii. Habitat Associated with Species of Local Importance

Urbanization, the increase in human settlement density and associated intensification of land use, has a profound and lasting effect on the natural environment and wildlife habitat (McKinney 2002, Blair 2004, Marzluff 2005, Munns 2006), is a major cause of native species local extinctions (Czech et al 2000), and is likely to become the primary cause of extinctions in the coming century (Marzluff et al. 2001a). Cities are typically located along rivers, on coastlines, or near large bodies of water. The associated floodplains and riparian systems make up a relatively small percentage of land cover in the western United States, yet they provide habitat for rich wildlife communities (Knopf et al. 1988), which in turn provide a source for urban habitat patches or reserves. Consequently, urban areas can support rich wildlife communities. In fact, species richness peaks for some groups, including songbirds, at an intermediate level of development (Blair 1999, Marzluff 2005).Protected wild areas alone cannot be depended on to conserve wildlife species. Impacts from catastrophic events, environmental changes, and evolutionary processes (genetic drift, inbreeding, colonization) can be magnified when a taxonomic group or unit is confined to a specific area, and no one area or group of areas is likely to support the biological processes necessary to maintain biodiversity over a range of geographic scales (Shaughnessy and O'Neil 2001). As well, typological approaches to taxonomy or the use of indicators present the risk that evolutionary potential will be lost when depending on reserves for preservation (Rojas 2007). Urban habitat is a vital link in the process of wildlife conservation in the U.S.

III. Consistency with Land Use Code Requirements

A. Zoning District Dimensional Requirements

The R-1 zoning dimensional requirements found in LUC 20.20.010 are generally met by the proposed house, but conformance will be verified during building permit review. All setbacks, height, lot coverage by structure, and impervious surface may be required to be

verified by survey through the building permit inspection process. **See Conditions of Approval in Section X of this report.**

B. Tree Retention

The tree retention and replacement requirements found in LUC 20.20.900 are generally met by the proposal. The site contains a total of 96 trees including those not surveyed by the arborist's report, that are on the property but not a potential hazard to the proposed development. The total number of trees to be removed is eight while the total number to be snagged is one resulting in 91.7% retention. The eight removed trees will be cut into logs and remain on site as woody debris. **See Conditions of Approval in Section X of this report.**

C. Critical Areas Requirements LUC 20.25H

The City of Bellevue Land Use Code Critical Areas Overlay District (LUC 20.25H) establishes performance standards and procedures that apply to development on any site which contains in whole or in part any portion designated as critical area, critical area buffer or structure setback from a critical area or buffer.

The City of Bellevue Land Use Code Critical Areas Overlay District (LUC 20.25H) establishes performance standards and procedures that apply to development on any site which contains in whole or in part any portion designated as critical area, critical area buffer or structure setback from a critical area or buffer. The project proposes to reduce a 75-foot toe-of-slope setback from a steep slope critical area and a 15-foot stream structure setback from the stream buffer and is subject to the performance standards found below:

i. Consistency with LUC 20.25H.140

Stream buffer and topographic site restraints leave limited options for development of the subject site. The site is largely encumbered by stream and slope buffers and their associated structure setbacks. The project proposal requires encroachment into 4,907 sf of the 75-foot toe of slope structure setback. As such, the applicant's proposal includes a toe of slope structure setback reduction from 75-feet down to 10-feet; mitigation measures are proposed to off set any adverse impacts.

The proposed mitigation plan includes provisions for impacts to critical areas and their associated buffers/structure setbacks for the subject proposal. In addition, the proposed mitigation plan assumes the mitigation responsibility associated with prior impact to the site from construction of public sewer utilities related to the previously approved Cougar Short Plat on adjacent property, south of the subject site. The Cougar Short Plat mitigation area is 6,844 sf and includes steep slope restoration, steep slope buffer restoration, and stream buffer restoration. The proposed mitigation associated with the subject SFR includes a total mitigation area of 5,975 sf that enhances the stream buffer and structure setback. A split-rail fence and critical areas signage is proposed to be installed along the 50-foot stream buffer and the reduced steep slope setback as part of the proposed mitigation plan. The mitigation plan set

also includes a tree removal and replanting plan which proposes the removal of eight trees to be cut into 24 logs and placed in development area as well as the snagging of one tree. The planting schedule includes the replacement of a variety of trees including big leaf maples, western red cedars, and western hemlocks. Additionally, the plan includes the replanting of various shrubs. **See document 1 for mitigation plan.**

The buffer reduction is supported by geotechnical reporting and recommendations provided by Earth Solutions NW, LLC. In a report dated July 16, 2020 and updated on November 5, 2020, a discussion of the steep slope critical area concludes that the proposal will not increase the potential for instability on or immediately adjacent to the property provided no foundations or associated excavations encroach withing 10-feet of slopes with gradients of 40 percent or greater. Subsequently, further analysis and testing took place at the request of the City of Bellevue Clearing & Grading department; the conclusion is further supported in the reporting submitted by Earth Solutions NW, LLC on January 26, 2021 and July 7, 2021. **See document 2 for Geotechnical Reporting and Recommendations.**

ii. Consistency with LUC 20.25H.075.D.3

Structure Setback Modification – Open Streams on Undeveloped Sites. The Director may waive or modify the structure setback on an undeveloped site as part of the permit or approval for the underlying proposal if the applicant demonstrates that:

1. Water quality, or slope stability as documented in a geotechnical report, will not be adversely affected;

All the preserved downslope buffer areas will be preserved and enhanced with native vegetation such that there should be no loss of water quality function provided by the buffer following reduction of the structure setback.

2. Encroachment into the structure setback will not disturb habitat of a species of local importance within a critical area or critical area buffer;

The area of proposed structure setback reduction is very small and will not impact any habitat of a species of local importance. One red alder tree in poor condition is proposed for snagging at the outer edge of the structure setback reduction. However, this tree was proposed for snagging by the project arborist regardless of whether the structure setback is reduced, and the snag will continue to provide wildlife habitat.

3. Vegetation in the critical area and critical area buffer will not be disturbed by construction, development or maintenance activities and will be maintained in a healthy condition for the anticipated life of the development; and

A rail fence will be installed along the edge of the buffer and all enhanced buffer areas will be preserved in perpetuity. In addition, a dry stack rock curb will be installed within

the structure setback to delineate the driveway paving from the planting area. This curb will have no impacts on plantings within the buffer.

4. Enhancement planting on the boundary between the structure setback and the critical area buffer will reduce impacts of development within the structure setback.
Additional plantings have been added to the reduced structure setback.

IV. Public Notice and Comment

Application Date:	November 5, 2020
Public Notice (500 feet):	December 10, 2020
Minimum Comment Period:	December 24, 2020

The Notice of Application for this project was published in the City of Bellevue Weekly Permit Bulletin and Seattle Times on December 10, 2020. It was mailed to property owners within 500 feet of the project site. No comments were received.

V. Summary of Technical Reviews

A. Clearing and Grading

The Clearing and Grading Division of the Development Services Department reviewed the proposal for compliance with Clearing and Grading codes and standards and has approved the application. A clearing and grading permit is required and any plans submitted must be consistent with this approval. The project geotechnical engineer is required to review the final plans and provide a letter to confirm that the plans conform with their recommendations. The geotechnical engineer is also required to inspect the work during construction and after to ensure slope conditions are unchanged. The site is subject to rainy season restrictions. **See Conditions of Approval in Section X of this report.**

B. Utilities

The Utilities Review section of Development Services Department reviewed the proposal for compliance with Utility codes and standards and has approved the application.

VI. State Environmental Policy Act (SEPA)

Per BCC 22.02.032 and WAC 197-11-800 construction of one single-family residence and associated improvements is exempt from SEPA review.

VII. Changes to Proposal Due to Staff Review

The applicant provided revisions to plans and reporting in response to comments from the City of Bellevue Clearing & Grading Department and the Land Use Department. Changes to the proposal include updated geotechnical analysis and reporting, revisions to the arborist report, updates to the Critical Areas reporting, and updates to the mitigation plan/site plan.

VIII. Decision Criteria

A. 20.25H.255.A Critical Areas Report Decision Criteria

The Director may approve, or approve with modifications, the proposed modification where the applicant demonstrates:

1. **The modifications and performance standards included in the proposal lead to levels of protection of critical area functions and values at least as protective as application of the regulations and standards of this code;**
   The performance standards for the project have been developed to increase the structural and plant species diversity of the enhancement areas and to utilize to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer.

2. **Adequate resources to ensure completion of any required restoration, mitigation and monitoring efforts;**
   Mitigation plans are required and found in attachment 1. Additionally, the Critical Areas Report provides details as a supplement to the plans which include provisions for construction management, monitoring, maintenance plan, contingency plan, as-builts, and financial guarantees. A maintenance surety will be required based on a submitted cost estimate prior to grading permit issuance. The surety will be released after five years assuming restoration has been successful. An installation surety in the amount of 150 percent of the cost of the work or improvements shall be submitted. After the work or improvements covered by a performance assurance device have been completed to the satisfaction of the City or, at the end of the time covered by a maintenance assurance device, the applicant may request the City to release the device. **See Conditions of Approval in Section X of this report.**

3. **The modifications and performance standards included in the proposal are not detrimental to the functions and values of critical area and critical area buffers off-site; and**
   The modifications and performance measures in this proposal are not detrimental to the functions and values of the stream buffer or steep slope critical area (see Section III for additional discuss above).

4. **The resulting development is compatible with other uses and development in the same land use district.**
   The project will construct improvements associated with a residence which are compatible with the surrounding uses which are also single-family homes.

B. 20.30P.140 Critical Area Land Use Permit Decision Criteria – Decision Criteria

The Director may approve, or approve with modifications an application for a Critical Area Land Use Permit if:

1. **The proposal obtains all other permits required by the Land Use Code;**
   The applicant must obtain a building permit and other necessary construction permits before beginning any work. **See Conditions of Approval in Section X of this report.**

2. **The proposal utilizes to the maximum extent possible the best available construction, design and development techniques which result in the least impact on the critical area and critical area buffer;**
   The performance standards for the project have been developed to increase the structural and plant species diversity of the enhancement areas and to utilize to the maximum extent possible the best available construction, design, and development techniques which result in the least impact on the critical area and critical area buffer.

3. **The proposal incorporates the performance standards of Part 20.25H to the maximum extent applicable, and ;**
   As discussed in Section III of this report, the performance standards of LUC 20.25H are being met or exceeded.

4. **The proposal will be served by adequate public facilities including street, fire protection, and utilities; and;**
   The proposed activity will not affect public services or facilities. Street, fire protection, and utilities will undergo further review under separate permit processes.

5. **The proposal includes a mitigation or restoration plan consistent with the requirements of LUC Section 20.25H.210; and**
   A mitigation planting plan has been submitted. The proposed planting will restore the steep slope with native plants. Installation and maintenance sureties will be required to ensure plant installation and survival over the 5-year monitoring period. **See Conditions of Approval in Section X of this report.**

6. **The proposal complies with other applicable requirements of this code.**
   As discussed in this report, the proposal complies with all other applicable requirements of the Land Use Code.

IX. Conclusion and Decision

After conducting the various administrative reviews associated with this proposal, including Land Use Code consistency, City Code and Standard compliance reviews, the Director of the Development Services Department does hereby **approve with conditions** the Critical Areas Land Use Permit to reduce the 75-foot toe-of-slope setback down to 10-feet, 15-foot stream structure setback down to 10-feet, and temporary disturbance to construct a new single-family residence and associated improvements. **Approval of this Critical Areas Land Use Permit does not constitute a permit for construction. A building permit is required and all plans are subject to review for compliance with applicable City of Bellevue codes and**

standards.

Note - Expiration of Critical Area Permit Approval: In accordance with LUC 20.30P.150, a Critical Areas Land Use Permit automatically expires and is void if the applicant fails to file for a permit or other necessary development permits within one year of the effective date of the approval.

X. Conditions of Approval

The applicant shall comply with all applicable Bellevue City Codes and Ordinances including but not limited to:

Applicable Ordinances	Contact Person
Clearing and Grading Code- BCC 23.76	Janney Gwo, 425-452-6190
Utilities Code – BCC Title 24	Jeremy Rosenlund, 425-452-7683
Land Use Code- BCC Title 20	Reilly Pittman, 425-452-4350

The following conditions are imposed under the Bellevue City Code as referenced.

1. **Building Permit Required:** Approval of this Critical Areas Land Use Permit does not constitute an approval of any construction permit. A building permit must be approved before construction can begin. Plans submitted as part of any permit application shall be consistent with the activity permitted under this approval.

   Authority: Land Use Code 20.30P.140
   Reviewer: Reilly Pittman, Development Services Department

2. **Mitigation Planting:** The proposed revised mitigation planting shown on the submitted planting plan included in attachment 1 is required to be installed. The planting plan is required to be submitted and approved prior to grading permit issuance. All permanent and temporary disturbance is required to be mitigated and/or restored. If any protected trees are found to be damaged and in need of removal additional mitigation will be required as part of this plan prior to grading permit issuance.

   Authority: Land Use Code 20.30P.140
   Reviewer: Reilly Pittman, Development Services Department

3. **Installation Surety:** An installation surety in the amount of 150 percent of the cost of the work or improvements shall be submitted. The cost estimate submitted for the improvements for the mitigation plan was $47,559.59; the amount of the installation surety shall be $71,339.39. After the work or improvements covered by a performance assurance device have been completed to the satisfaction of the City or, at the end of the time covered by a maintenance assurance device, the applicant may request the City to release the device.

Authority: Land Use Code 20.30P.160
Reviewer: Reilly Pittman, Development Services Department

4. **Maintenance Surety:** In order to ensure the restoration successfully establishes, a maintenance assurance device for an amount equal the estimated cost of maintenance shall be held for a period of five years from the date of successful installation. The maintenance assurance device will be released to the applicant upon receipt of documentation of reporting successful establishment in compliance with the performance standards described in the submitted critical areas report as attachment 2.

   Authority: Land Use Code 20.30P.160
   Reviewer: Reilly Pittman, Development Services Department

5. **Monitoring:** The planting area shall be maintained and monitored for 5 years as detailed in the monitoring plan, goals, and performance standards found in the submitted critical areas report as attachment 2.

   Annual monitoring reports are to be submitted to Land Use each of the five years. The reports, along with a copy of the planting plan, can be sent to Reilly Pittman at rpittman@bellevuewa.gov or to the address below:

   Environmental Planning Manager
   Development Services Department
   City of Bellevue
   PO Box 90012
   Bellevue, WA 98009-9012

   Authority: Land Use Code 20.30P.140; 20.25H.220
   Reviewer: Reilly Pittman, Development Services Department

6. **Land Use Inspection Required:** Inspection of mitigation planting must be completed by the Land Use Planner as part of the grading permit inspection process. A Land Use inspection will be added to the grading permit.

   Authority: Land Use Code 20.25H.210
   Reviewer: Reilly Pittman, Development Services Department

7. **Geotechnical Review and Letter:** The project geotechnical engineer must review the final plans. A letter from the geotechnical stating that the plans conform to the recommendations in the geotechnical report and any addendums and supplements must be submitted to the clearing and grading section prior to issuance of the construction permit.

   Authority: Clearing & Grading Code 23.76.050

Reviewer: Janney Gwo, Development Services Department

8. **Geotechnical Inspection:** The project geotechnical engineer must provide geotechnical inspection during project construction, including subgrades for foundations and footings, and any unusual seepage, slope, or subgrade conditions

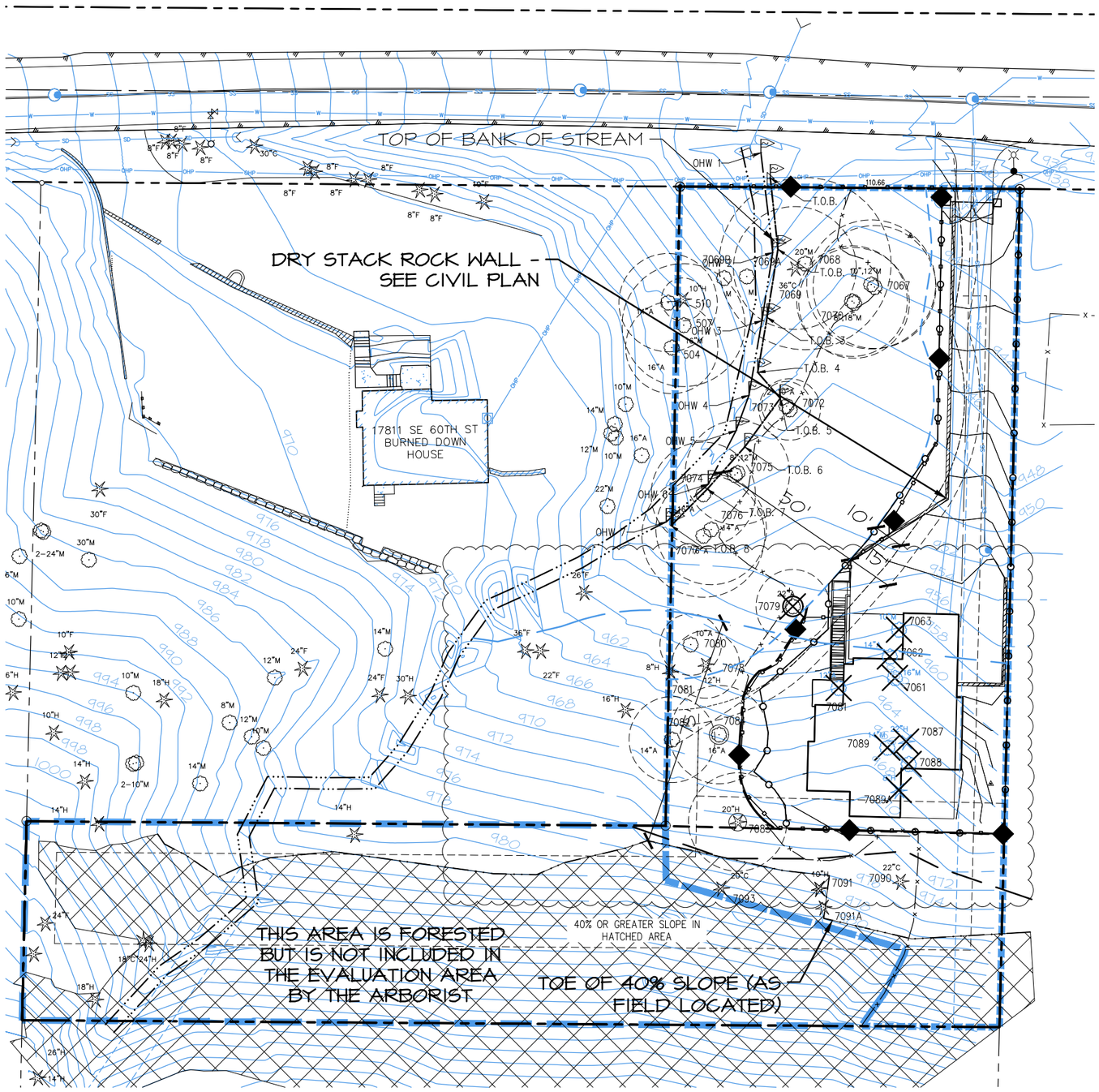
   Authority: Bellevue City Code 23.76.050
   Reviewer: Janney Gwo, Development Services Department

9. **Geotechnical Monitoring:** The project geotechnical engineer of record or his representative must be on site during critical earthwork operations. The geotechnical engineer shall observe all excavations and fill areas. In addition, the engineer shall monitor the soil cuts prior to construction of rockeries and verify compaction in fill areas. The engineer must submit field report in writing to the DSD inspector for soils verification and foundation construction. All earthwork must be in general conformance with the recommendations in the geotechnical report.

   Authority: Bellevue City Code 23.76.160
   Reviewer: Janney Gwo, Development Services Department

10. **Rainy Season Restrictions**: No clearing and grading activity may occur during the rainy season, which is defined as October 1 through April 30 without written authorization of the Development Services Department. Should approval be granted for work during the rainy season, increased erosion and sedimentation control measures, representing the best available technology must be implemented prior to beginning or resuming site work.

    Authority: Bellevue City Code 23.76.093
    Reviewer: Janney Gwo, Development Services Department



PLAN LEGEND

- PROPERTY LINE
- ORDINARY HIGH WATER
- TOE OF 40% SLOPE
- TOP OF BANK OF STREAM
- 50' STREAM BUFFER
- 75' TOE OF SLOPE STRUCTURE SETBACK
- 10' REDUCED STEEP SLOPE BUFFER
- PROPOSED STREAM BUFFER
- PROPOSED STEEP SLOPE BUFFER
- 15' STRUCTURE SETBACK FROM STREAM BUFFER
- 10' REDUCED STRUCTURE SETBACK FROM STREAM BUFFER
- RESTORATION LIMITS / EDGE OF NATIVE FOREST
- CLEARING LIMITS FOR PROJECT
- EXISTING TREES TO REMAIN
- EXISTING TREES TO BE REMOVED
- EXISTING TREES TO BE SNAGGED AT 15-20' HT.
- SPLIT-RAIL FENCE - ON PROPOSED BUFFER AND PROPERTY LINE
- CRITICAL AREA SIGN - 50' SPACING ALONG PROPOSED BUFFERS
- AREA OF TREE SURVEY - 27,424 SF
- AREA OF TREE EXTRAPOLATION - 16,159 SF

SEE FIGURE 2 FOR EXISTING SIGNIFICANT TREE LIST AND RETENTION CALCULATIONS

GRAPHIC SCALE (IN FEET)

0 20 40 60 80 120

SCALE: 1:40

N

NOTES

1. BASE INFORMATION PROVIDED BY CORE DESIGN, INC., 12100 NE 195TH ST., SUITE 300, BOTHELL, WA 98011, (425) 885-7877.

PROJECT 4548B
DRAWN SO
SCALE AS NOTED
DATE 11-19-20
REVISED 05-25-21
1/8

FIGURE 1: EXISTING TREE REMOVAL PLAN
STEEP SLOPE AND STREAM BUFFER MITIGATION PLAN
BROWN DIVINE
PARCEL 242405-9036
BELLEVUE, WASHINGTON

Altmann Oliver Associates, LLC
A0A
Environmental Planning & Landscape Architecture
PO Box 578 Carnation, WA 98014 Office (425) 333-4535 Fax (425) 333-4599

4548B-MIT-05-25-21.dwg

EXISTING TREES

NUMBER	SPECIES	DBH	REMAIN	REMOVE
504	ALDER	16"	X	
507	MAPLE	16"	X	
510	HEMLOCK	10"	X	
7061	MAPLE	16"		X
7062	ALDER	14"		X
7063	MAPLE	10"		X
7067	MAPLE	10", 12"	X	
7068	MAPLE	20"	X	
7069	CEDAR	36"	X	
7069A	MAPLE		X	
7069B	MAPLE		X	
7070	MAPLE	8", 18"	X	
7072	ALDER	10"	X	
7073	ALDER	10"	X	
7074	ALDER	16"	X	
7075	MAPLE	8", 12"	X	
7076	ALDER	14"	X	
7077	ALDER	16"	X	
7078	HEMLOCK	12"	X	
7079	ALDER	22"	SNAGGED	
7080	ALDER	10"	X	
7081	HEMLOCK	8"	X	
7081	ALDER	12"		X
7082	ALDER	14"	X	
7083	HEMLOCK	20"	X	
7084	ALDER	16"	X	
7087	HEMLOCK	8"		X
7088	HEMLOCK	22'		X
7089	MAPLE	14"		X
7089A	HEMLOCK	8"		X
7090	CEDAR	22"	X	
7091	HEMLOCK	10"	X	
7091A			X	
7093	CEDAR	20"	X	

*EXTRAPOLATED TREES - 62

TOTAL SIGNIFICANT TREES - 96, TOTAL TREES TO REMAIN - 87, TOTAL TREES TO BE SNAGGED - 1, TOTAL TREES TO BE REMOVED - 8 = 91.7% RETAINED (>25% REQUIRED).

*BASED ON THE AMOUNT AND CALIPER INCHES IN THE SURVEYED PORTION OF THE SITE, THE NUMBER OF SIGNIFICANT TREES IN THE NON-SURVEYED PORTION OF THE SITE WOULD POSSIBLY BE 62 WITH AN AVERAGE CALIPER INCHES OF 14".

PROJECT 4548B
DRAWN SO
SCALE AS NOTED
DATE 11-19-20
REVISED 05-25-21
2/8

FIGURE 2: EXISTING TREE REMOVAL LIST
STEEP SLOPE AND STREAM BUFFER MITIGATION PLAN
BROWN DIVINE
PARCEL 242405-9036
BELLEVUE, WASHINGTON

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Environmental Planning & Landscape Architecture
PO Box 578 Carnation, WA 98014 Office (425) 333-4535 Fax (425) 333-4569

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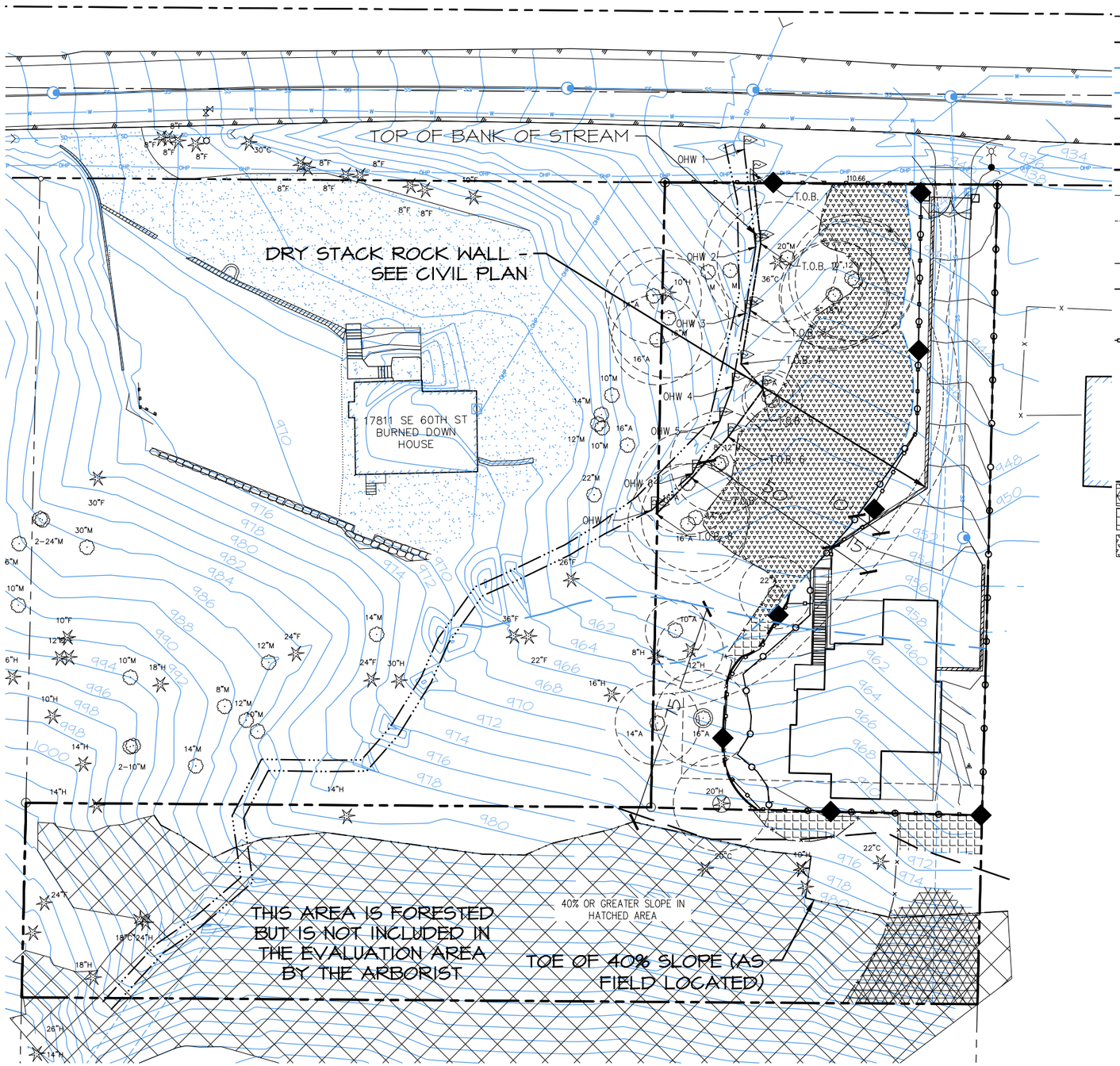

PLAN LEGEND

- PROPERTY LINE
- ORDINARY HIGH WATER
- TOE OF 40% SLOPE
- TOP OF BANK OF STREAM
- 50' STREAM BUFFER
- 75' TOE OF SLOPE STRUCTURE SETBACK
- 10' REDUCED STEEP SLOPE BUFFER
- PROPOSED STREAM BUFFER
- PROPOSED STEEP SLOPE BUFFER
- 15' STRUCTURE SETBACK FROM STREAM BUFFER
- 10' REDUCED STRUCTURE SETBACK FROM STREAM BUFFER
- RESTORATION LIMITS / EDGE OF NATIVE FOREST
- CLEARING LIMITS FOR PROJECT
- EXISTING TREES TO REMAIN
- SPLIT-RAIL FENCE - ON PROPOSED BUFFER AND PROPERTY LINE
- CRITICAL AREA SIGN - 50' SPACING ALONG PROPOSED BUFFERS

MITIGATION LEGEND (FOR COUGAR PLAT CLEARING)

- STEEP SLOPE RESTORATION - 1,223 SF
- STEEP SLOPE BUFFER RESTORATION - 713 SF
- STREAM BUFFER RESTORATION - 4,908 SF

TOTAL MITIGATION - 6,844 SF

MITIGATION FOR BROWN/DIVINE - SEE FIGURE 4

GRAPHIC SCALE (IN FEET)

0 20 40 60 80 120

SCALE: 1:40

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NOTES

1. BASE INFORMATION PROVIDED BY CORE DESIGN, INC., 12100 NE 195TH ST., SUITE 300, BOTHELL, WA 98011, (425) 885-7877.

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FIGURE 3: BUFFER MITIGATION FOR COUGAR PLAT
STEEP SLOPE AND STREAM BUFFER MITIGATION PLAN
BROWN DIVINE
PARCEL 2424059036
BELLEVUE, WASHINGTON

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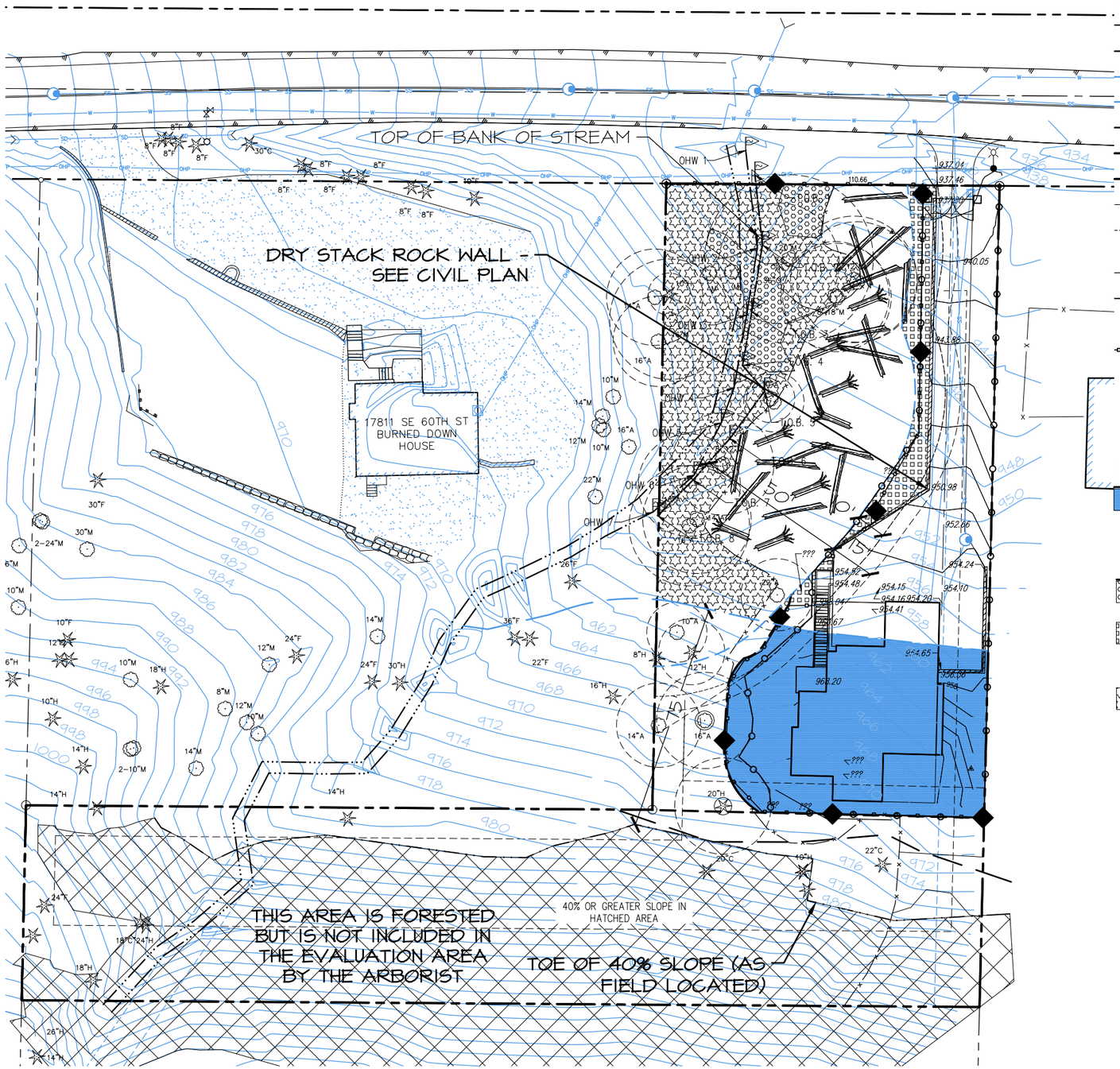

PLAN LEGEND

- PROPERTY LINE
- ORDINARY HIGH WATER
- TOE OF 40% SLOPE
- TOP OF BANK OF STREAM
- 50' STREAM BUFFER
- 75' TOE OF SLOPE STRUCTURE SETBACK
- 10' REDUCED STEEP SLOPE BUFFER
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- RESTORATION LIMITS / EDGE OF NATIVE FOREST
- CLEARING LIMITS FOR PROJECT
- EXISTING TREES TO REMAIN
- SPLIT-RAIL FENCE - ON PROPOSED BUFFER AND PROPERTY LINE
- CRITICAL AREA SIGN - 50' SPACING ALONG PROPOSED BUFFERS

IMPACT LEGEND (FOR BROWN/DIVINE)

- STEEP SLOPE BUFFER REDUCTION - 4,907 SF

MITIGATION LEGEND (FOR BROWN/DIVINE IMPACTS)

- STREAM BUFFER ENHANCEMENT/REPLACEMENT - 922 SF
- ENHANCEMENT PLANTING BETWEEN THE REDUCED STRUCTURE SETBACK AND STREAM BUFFER - 1,011 SF
- CONIFER SUPPLEMENTATION - 4,747 SF
- TOTAL MITIGATION - 5,975 SF
- WOODY DEBRIS PLACEMENT (24 LOGS FROM THE 8 REMOVED TREES IN THE DEVELOPMENT AREA)

GRAPHIC SCALE (IN FEET)

0 20 40 60 80 120

SCALE: 1:40

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FIGURE 4: BUFFER IMPACT FOR BROWN/DIVINE
STEEP SLOPE AND STREAM BUFFER MITIGATION PLAN
BROWN DIVINE
PARCEL 242405-9036
BELLEVUE, WASHINGTON

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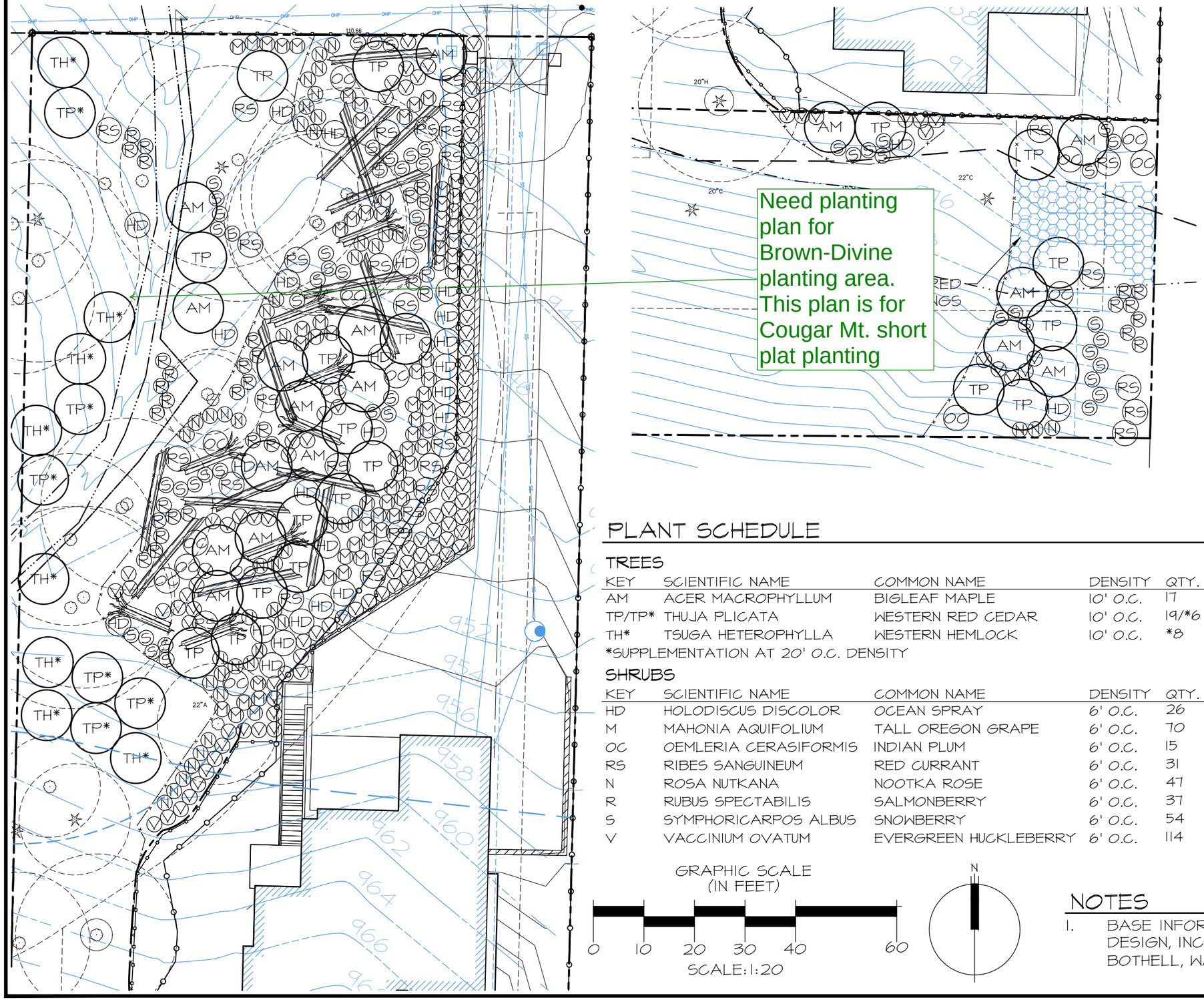

PLANT SCHEDULE

TREES

KEY	SCIENTIFIC NAME	COMMON NAME	DENSITY	QTY.	SIZE (MIN.)	NOTES
AM	ACER MACROPHYLLUM	BIGLEAF MAPLE	10' O.C.	17	2 GAL.	SINGLE TRUNK
TP/TP*	THUJA PLICATA	WESTERN RED CEDAR	10' O.C.	19/*6	2 GAL.	FULL & BUSHY
TH*	TSUGA HETEROPHYLLA	WESTERN HEMLOCK	10' O.C.	*8	2 GAL.	FULL & BUSHY

*SUPPLEMENTATION AT 20' O.C. DENSITY

SHRUBS

KEY	SCIENTIFIC NAME	COMMON NAME	DENSITY	QTY.	SIZE (MIN.)	NOTES
HD	HOLODISCUS DISCOLOR	OCEAN SPRAY	6' O.C.	26	1 GAL.	MULTI-STEM (3 MIN.)
M	MAHONIA AQUIFOLIUM	TALL OREGON GRAPE	6' O.C.	70	1 GAL.	FULL & BUSHY
OC	OEMLERIA CERASIFORMIS	INDIAN PLUM	6' O.C.	15	1 GAL.	MULTI-STEM (3 MIN.)
RS	RIBES SANGUINEUM	RED CURRANT	6' O.C.	31	1 GAL.	MULTI-STEM (3 MIN.)
N	ROSA NUTKANA	NOOTKA ROSE	6' O.C.	47	1 GAL.	MULTI-STEM (3 MIN.)
R	RUBUS SPECTABILIS	SALMONBERRY	6' O.C.	37	1 GAL.	MULTI-STEM (3 MIN.)
S	SYMPHORICARPOS ALBUS	SNOWBERRY	6' O.C.	54	1 GAL.	MULTI-STEM (3 MIN.)
V	VACCINIUM OVATUM	EVERGREEN HUCKLEBERRY	6' O.C.	114	1 GAL.	FULL & BUSHY

GRAPHIC SCALE (IN FEET)

0 10 20 30 40 60

SCALE:1:20

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NOTES

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FIGURE 5: PLANTING PLAN
STEEP SLOPE AND STREAM BUFFER MITIGATION PLAN
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PARCEL 242405-9036
BELLEVUE, WASHINGTON

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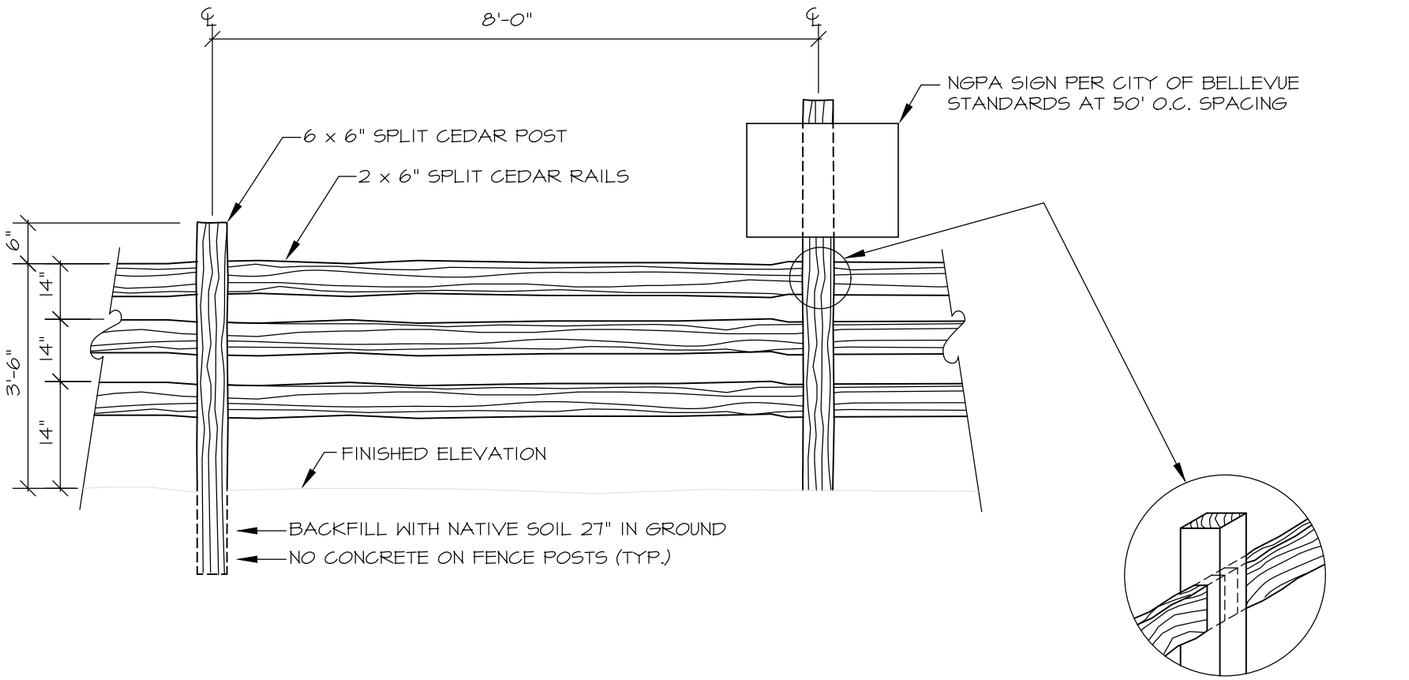
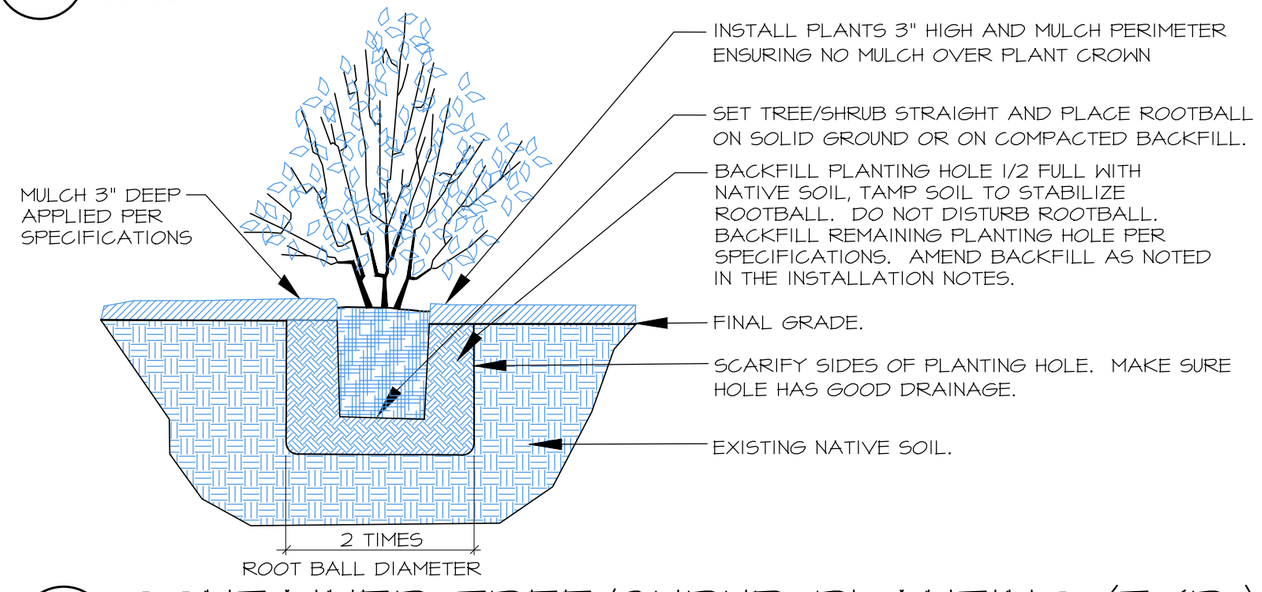


1 SPLIT-RAIL FENCE WITH NGPA SIGNS

SCALE: NTS



2 CONTAINER TREE/SHRUB PLANTING (TYP.)

SCALE: NTS

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FIGURE 6: CONSTRUCTION DETAILS
STEEP SLOPE AND STREAM BUFFER MITIGATION PLAN
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PARCEL 242405-9036
BELLEVUE, WASHINGTON

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SPECIFICATIONS

1. CONTRACTOR INFORMATION. WHEN IT IS AVAILABLE, CONTACT INFORMATION SHALL BE PROVIDED TO THE CITY OF BELLEVUE THAT INCLUDES NAMES, ADDRESSES AND PHONE NUMBERS OF PERSONS/FIRMS THAT WILL BE RESPONSIBLE FOR INSTALLING REQUIRED PLANTS AND PERFORMING REQUIRED MAINTENANCE.
2. CONTRACTOR'S QUALIFICATIONS. ALL WORK SHALL BE PERFORMED BY A LICENSED LANDSCAPE CONTRACTOR REGISTERED IN THE STATE OF WASHINGTON. CONTRACTOR MUST BE EXPERIENCED IN MITIGATION AND RESTORATION WORK. THE CONTRACTOR SHALL PROVIDE THAT THERE IS ONE PERSON ON THE SITE AT ALL TIMES DURING WORK AND INSTALLATION WHO IS THOROUGHLY FAMILIAR WITH THE TYPE OF MATERIALS BEING INSTALLED AND THE BEST METHODS FOR THEIR INSTALLATION, AND WHO SHALL DIRECT ALL WORK BEING PERFORMED UNDER THESE SPECIFICATIONS. THIS PERSON SHALL HAVE A MINIMUM OF FIVE (5) YEARS EXPERIENCE INSTALLING NATIVE PLANT MATERIALS FOR WETLAND MITIGATION OR RESTORATION PROJECTS, UNLESS OTHERWISE ALLOWED BY THE LANDSCAPE DESIGNER, WETLAND BIOLOGIST AND/OR THE CITY OF BELLEVUE.
3. IN ALL MITIGATION AREAS, WA STATE CLASS A, B AND C NOXIOUS WEEDS SHALL BE GRUBBED AND MAINTAINED OUT OF THE MITIGATION AREAS FOR THE DURATION OF 5-YEAR MONITORING PERIOD. GRUBBED PLANTS TO BE REMOVED FROM SITE PRIOR TO PLANTING.
4. ALL PLANTS SHOULD BE INSTALLED BETWEEN DECEMBER 1ST AND MARCH 15TH UNLESS IRRIGATION IS PROVIDED AT TIME OF PLANTING.
5. INTERMEDIATE INSPECTIONS. ALL PLANTS SHALL BE INSPECTED AND APPROVED BY THE LANDSCAPE DESIGNER AND/OR WETLAND BIOLOGIST PRIOR TO INSTALLATION. CONDITION OF ROOTS OF A RANDOM SAMPLE OF PLANTS WILL BE INSPECTED, AS WELL AS ALL ABOVEGROUND GROWTH ON ALL PLANTS. PLANT MATERIAL MAY BE APPROVED AT THE SOURCE, AT THE DISCRETION OF THE LANDSCAPE DESIGNER AND THE WETLAND BIOLOGIST, BUT ALL MATERIAL MUST BE RE-INSPECTED AND APPROVED ON THE SITE PRIOR TO INSTALLATION. PLANT LOCATIONS SHALL ALSO BE INSPECTED AND APPROVED PRIOR TO PLANTING.
6. PRIOR TO INSTALLATION OF PLANT MATERIAL, THE PLANTING AREAS WILL BE LAID OUT BASED ON THE PLANTING PLAN.
7. PRIOR TO ANY WORK WITHIN THE MITIGATION AREAS, THE SCOPE OF THE MITIGATION WORK WILL BE REVIEWED BY AOA, THE LANDSCAPE CONTRACTOR AND THE GENERAL CONTRACTOR TO ENSURE THAT ALL PARTIES UNDERSTAND PLAN SPECIFICS.
8. UPON REMOVAL OF INVASIVES, AOA SHALL REVIEW THE SITE WITH THE LANDSCAPE CONTRACTOR TO DETERMINE LOCATIONS OF TOPSOIL PLACEMENT OUTSIDE OF PREVIOUSLY CLEARED AREAS. IN THE PREVIOUSLY CLEARED AREAS, 6" OF CARPINITO BROTHERS PREMIUM 3-WAY TOPSOIL SHALL BE PLACED AND LIGHTLY TILLED INTO THE TOP 6" OF NATIVE SOILS PRIOR TO PLANTING.
9. & REMOVED TREES FROM THE SITE SHALL BE BROKEN INTO THREE PIECES WITH ROOT WAD AND PLACED WITHIN THE PREVIOUSLY CLEARED MITIGATION AREAS. AOA TO REVIEW LOG PLACEMENT WITH CLEARING CONTRACTOR PRIOR TO PLACEMENT AND AFTER WEED REMOVAL AND TOPSOIL PLACEMENT.
10. ALL PLANTS SHALL BE PIT-PLANTED IN PLANTING PITS EXCAVATED 2X THE DIAMETER OF THE PLANT. PITS SHALL BE BACKFILLED WITH A 30/70 MIX OF STEERCO TO NATIVE TOPSOIL. PLANTS SHALL BE INSTALLED 3" HIGH AND SURFACED MULCHED TO A DEPTH OF 3" WITH HOG-FUEL, WOOD CHIPS OR BARK MULCH PLACED CONTINUOUSLY THROUGHOUT THE PLANTING BED IN THE PREVIOUSLY CLEARED MITIGATION AREAS AND 24" DIAMETER IN THE ENHANCEMENT AND CONIFER SUPPLEMENTATION AREAS.
11. NGPA BOUNDARY FENCE AND SIGNAGE - THE APPLICANT SHALL PERFORM A FIELD SURVEY OF PROPOSED BUFFER BOUNDARIES COMPLETED BY A WASHINGTON STATE LICENSED SURVEYOR. THE BOUNDARY OF THE NGPA SHALL BE IDENTIFIED, FENCED OR DEMARCATED BY WALLS, AND MARKED WITH NGPA BOUNDARY SIGNAGE PER FIGURE 1.
12. ALL PLANTS SHALL BE NURSERY GROWN (IN WESTERN WA OR OR) FOR AT LEAST 1 YEAR FROM PURCHASE DATE, FREE FROM DISEASE OR PESTS, WELL-ROOTED, BUT NOT ROOT-BOUND AND TRUE TO SPECIES.
13. PLANT LAYOUT SHALL BE APPROVED BY AOA PRIOR TO INSTALLATION AND APPROVED UPON COMPLETION OF PLANTING.
14. UPON COMPLETION OF PLANTING, ALL PLANTS SHALL BE THOROUGHLY WATERED VIA A TEMPORARY IRRIGATION SYSTEM (DESIGN-BUILT BY LANDSCAPE CONTRACTOR). SYSTEM SHALL SUPPLY 1/2" OF FLOW TWICE-WEEKLY BETWEEN JUNE 15 AND OCTOBER 15 THE FIRST YEAR OF PLANTING. FLOW SHALL BE REDUCED TO TWICE WEEKLY THE SECOND YEAR BETWEEN JULY 1 AND SEPTEMBER 30 AND ONCE WEEKLY IF DEEMED NECESSARY BY AOA THE THIRD YEAR. SYSTEM SHALL BE WINTERIZED EACH YEAR BY OCTOBER 31.
15. UPON APPROVAL OF PLANTING INSTALLATION BY AOA, THE CITY OF BELLEVUE WILL BE NOTIFIED TO CONDUCT A SITE REVIEW FOR FINAL APPROVAL OF CONSTRUCTION.
16. MAINTENANCE SHALL BE REQUIRED IN ACCORDANCE WITH THE CITY OF BELLEVUE SENSITIVE AREAS MITIGATION GUIDELINES AND APPROVED PLANS.
17. MAINTENANCE SHALL BE IMPLEMENTED ON A REGULAR BASIS ACCORDING TO THE SCHEDULE BELOW.

ANNUAL MAINTENANCE SCHEDULE

MAINTENANCE ITEM	J	F	M	A	M	J	J	A	S	O	N	D
WEED CONTROL			1		1	1	1	1	1	1		
GENERAL MAINT.			1		1	1	1	1	1	1		
WATERING - YEAR 1						4	8	8	8	4		
WATERING - YEAR 2							8	8	8			
WATERING - YEAR 3							4	4	4			

1-8 = NUMBER OF TIMES TASK SHALL BE PERFORMED PER MONTH.

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FIGURE 7: SPECIFICATIONS
STEEP SLOPE AND STREAM BUFFER MITIGATION PLAN
BROWN DIVINE
PARCEL 242405-9036
BELLEVUE, WASHINGTON

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MAINTENANCE & MONITORING PLAN

CONSTRUCTION MANAGEMENT

1. Prior to commencement of any work in the mitigation areas, the mitigation areas and NGPA boundry will be staked. A pre-installation meeting will be held at the site to review and discuss all aspects of the project with the owner.
2. A biologist will supervise plan implementation during construction to ensure that objectives and specifications of the mitigation plan are met.
3. Any necessary significant modifications to the design that occur as a result of unforeseen site conditions will be jointly approved by the City of Bellevue and the biologist prior to their implementation.

MONITORING METHODOLOGY

1. The monitoring program will be conducted twice yearly (in the beginning and end of the growing season) for a period of five years, with reports submitted annually (by the end of the calendar year) to the City of Bellevue.
2. Vegetation establishment within the mitigation areas will be monitored during each field visit with a record kept of all plant species found.
3. Photo-points will be established from which photographs will be taken throughout the monitoring period. These photographs will document general appearance and progress in plant community establishment in the mitigation areas. Review of the photos over time will provide a semi-quantitative representation of success of the mitigation plan.

PERFORMANCE STANDARDS

1. Success of plant establishment within the restoration areas will be evaluated on the basis of percent survival of planted species. For woody planted species, success will be based on at least an 85% survival rate of all planted trees and shrubs or native woody recruitment by the end of the five-year monitoring period.
2. Exotic and invasive plant species will be maintained at levels below 10% total cover. Removal of these species will occur immediately following the monitoring event in which they surpass the above maximum coverage. Removal will occur by hand whenever possible.
3. In all planting areas, native woody cover will be 10% at Year 1, 15% at Year 2, 25% at Year 3, 50% at Year 4 and 60% at Year 5.

MAINTENANCE (M) & CONTINGENCY (C)

1. Invasive plant removal shall be done in March, May, July and October of each of the five years of monitoring (M).
2. Established performance standards for the project will be compared to the monitoring results in order to judge the success of the mitigation project.
2. Contingency will include many of the items listed below and would be implemented if these performance standards are not met.
3. Additional maintenance and remedial action on the site will be implemented immediately upon completion of the monitoring event at the direction of AOA, (unless otherwise specifically indicated below).

- replace dead plants with the same species or a substitute species that meet the goal of the restoration plan (C)
- re-plant areas after reason for failure has been identified (e.g., moisture regime, poor plant stock, disease, shade/sun conditions, wildlife damage, etc.) (C)

PERFORMANCE BOND

1. A performance bond or other surety device will be posted with the City of Bellevue by the applicant to cover the costs of the mitigation plan implementation (including labor, materials, maintenance, and monitoring).
2. The bond or assignment may be released in partial amounts in proportion to work successfully completed over the five year monitoring period, as the applicant demonstrates performance and corrective measures.

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FIGURE 8: MAINTENANCE & MONITORING PLAN
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